

8.7.4 Test data, continued

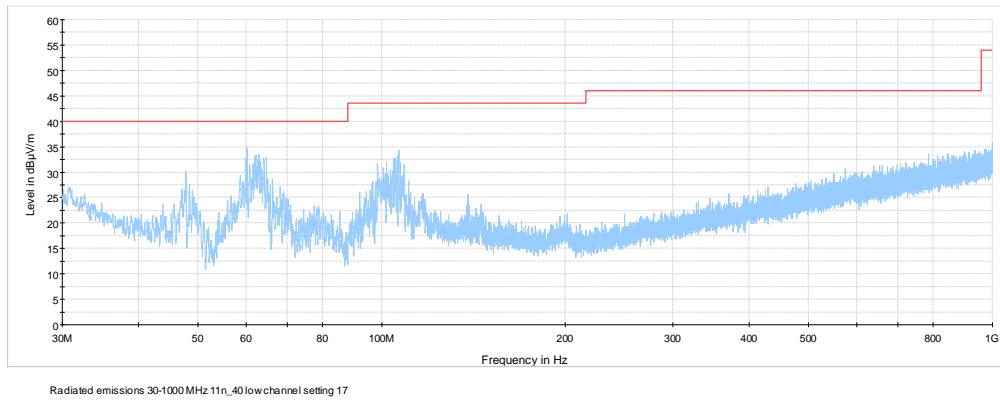


Figure 8.7-44: Radiated spurious emissions 30 MHz – 1 GHz for 802.11n HT40, low channel

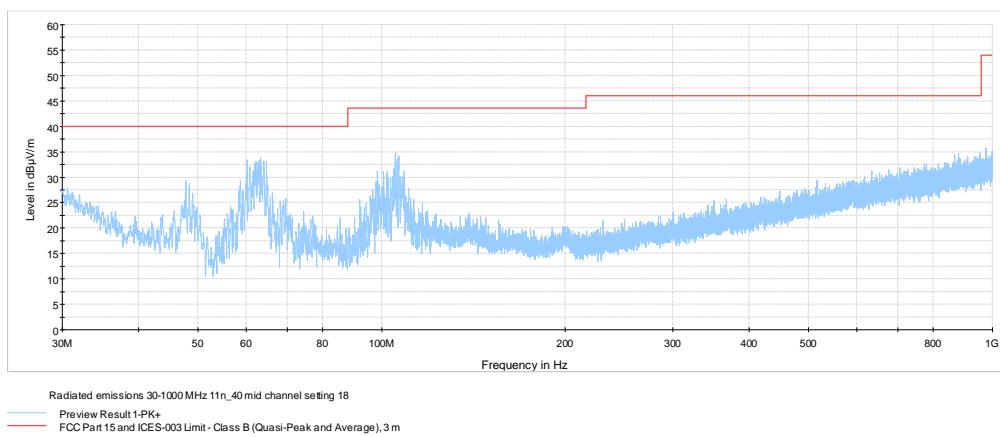


Figure 8.7-45: Radiated spurious emissions 30 MHz – 1 GHz for 802.11n HT40, mid channel

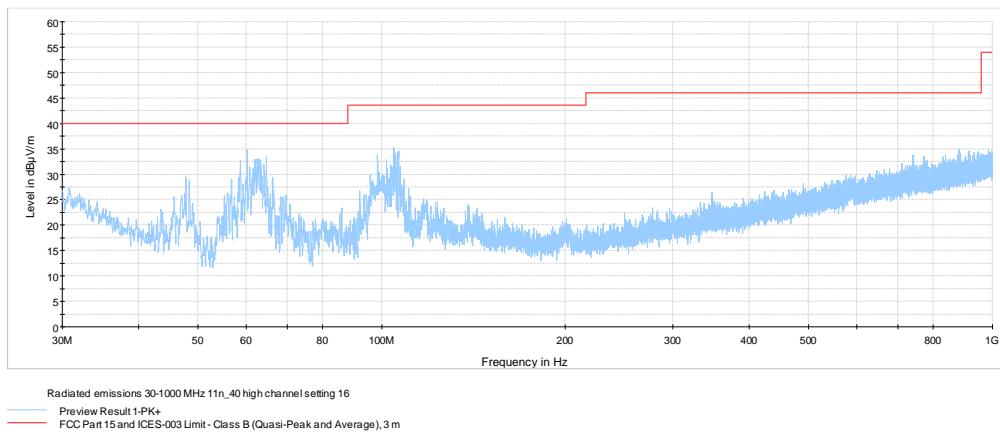


Figure 8.7-46: Radiated spurious emissions 30 MHz – 1 GHz for 802.11n HT40, high channel

8.7.4 Test data, continued

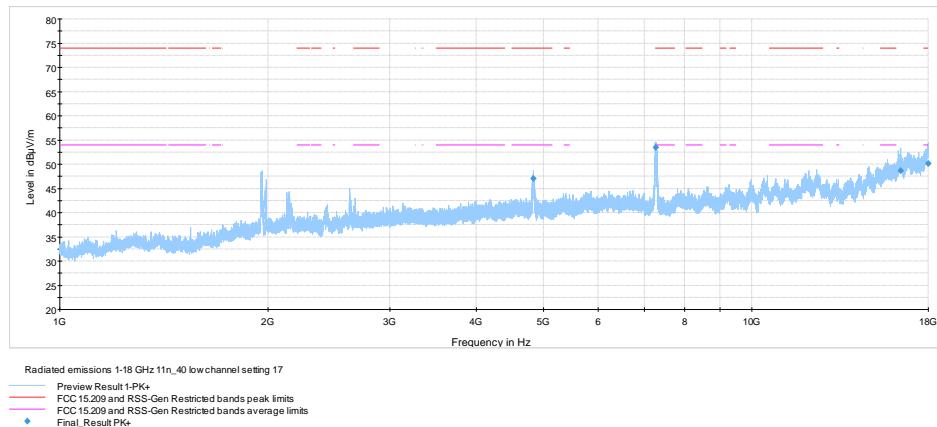


Figure 8.7-47: Radiated spurious emissions 1 - 18 GHz for 802.11n HT40, low channel

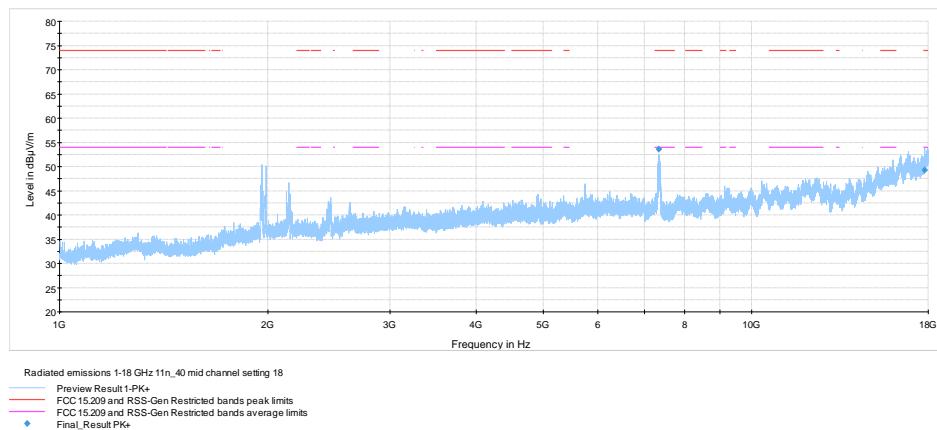


Figure 8.7-48: Radiated spurious emissions 1 - 18 GHz for 802.11n HT40, mid channel

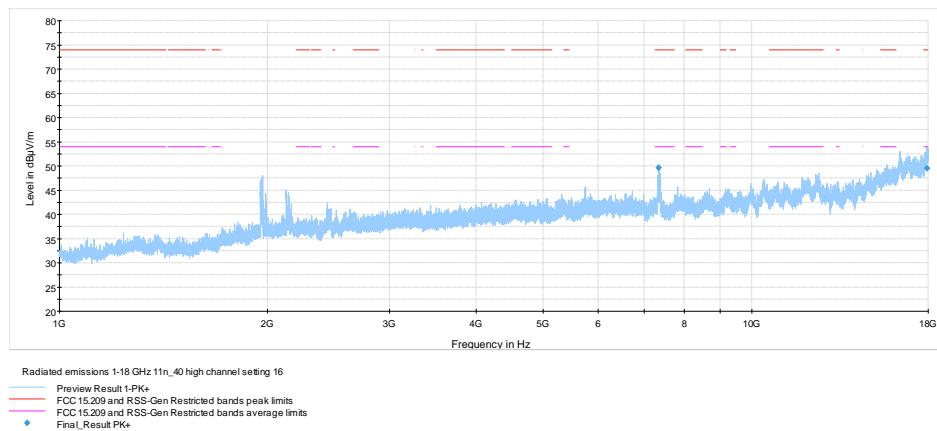


Figure 8.7-49: Radiated spurious emissions 1 - 18 GHz for 802.11n HT40, high channel

8.7.4 Test data, continued

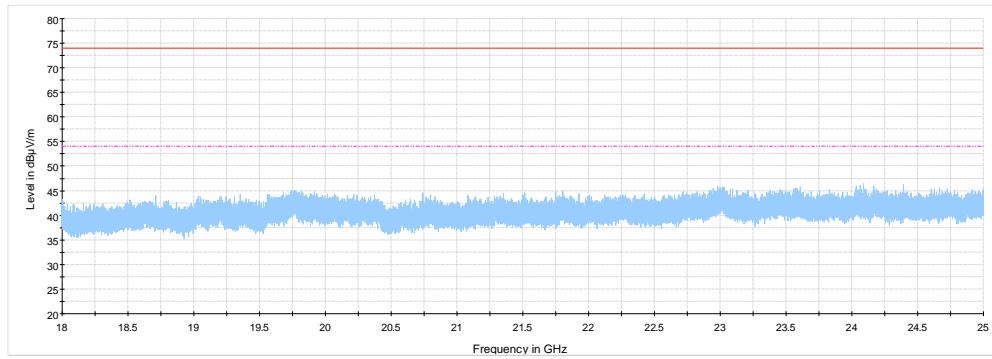


Figure 8.7-50: Radiated spurious emissions 18 - 25 GHz for 802.11n HT40, low channel

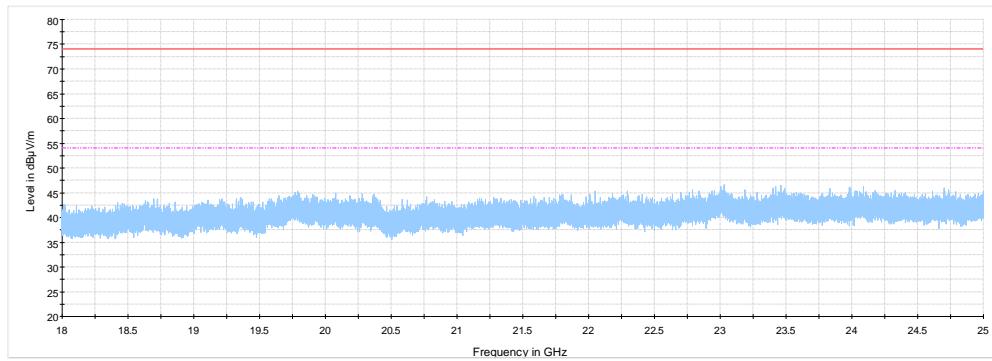


Figure 8.7-51: Radiated spurious emissions 18 - 25 GHz for 802.11n HT40, mid channel

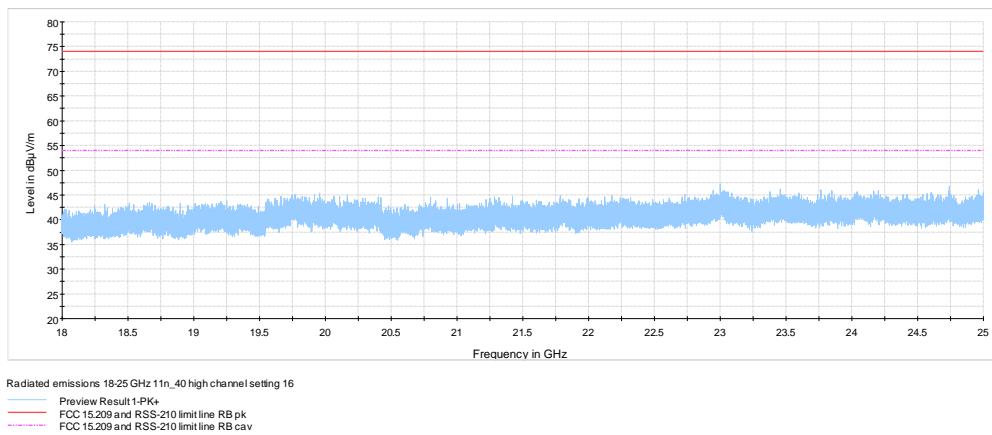


Figure 8.7-52: Radiated spurious emissions 18 - 25 GHz for 802.11n HT40, high channel

8.7.4 Test data, continued

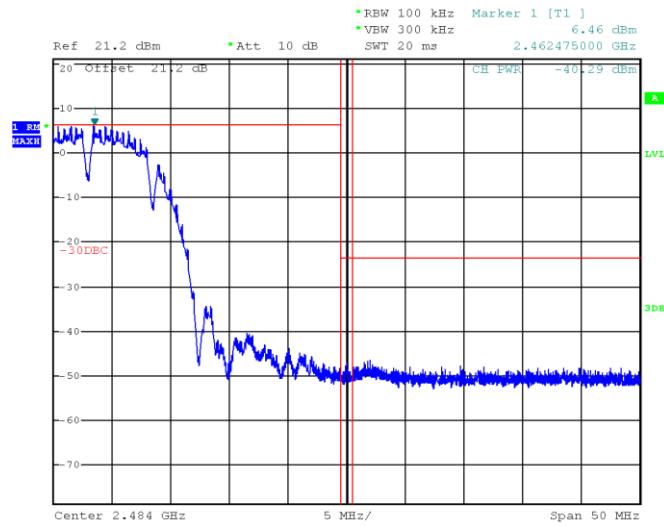
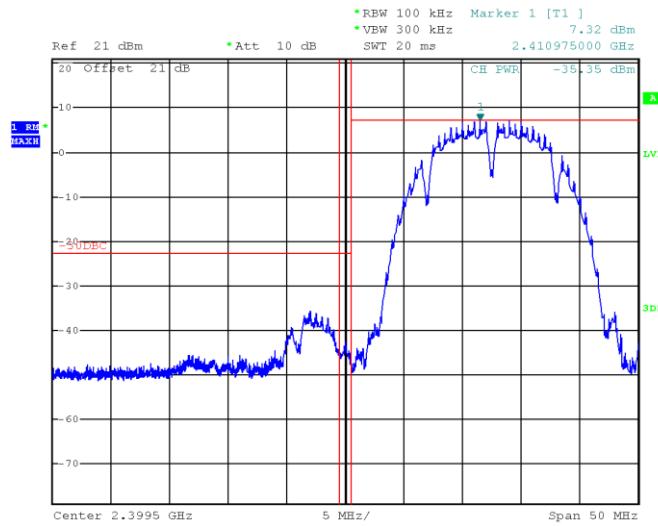
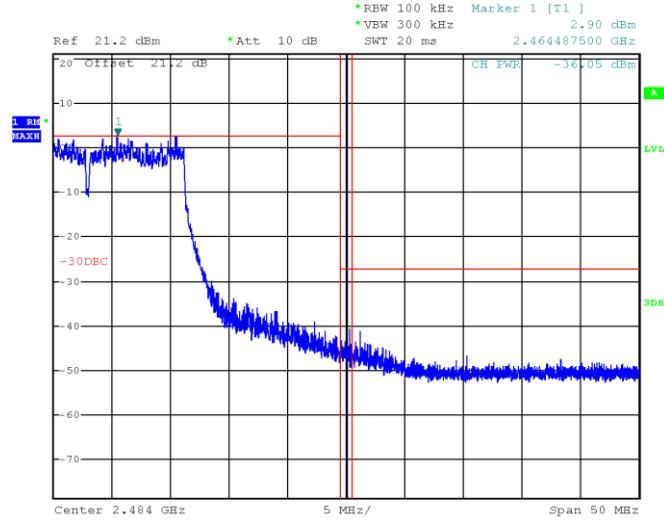
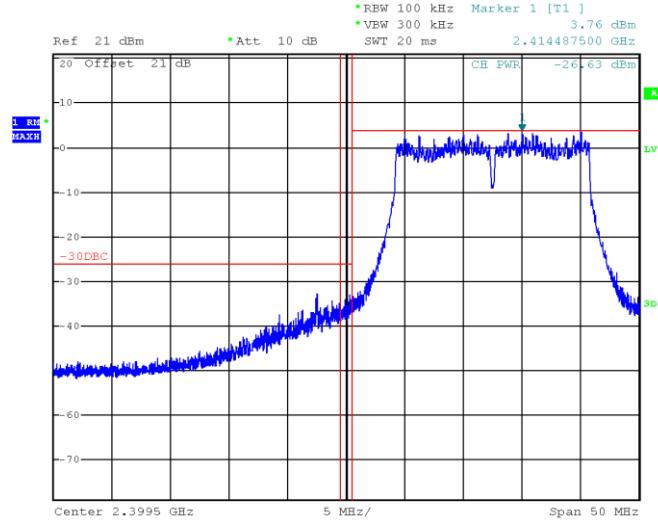


Figure 8.7-53: Conducted band edge emissions for 802.11b, low channel

Figure 8.7-54: Conducted band edge emissions for 802.11b, high channel



8.7.4 Test data, continued

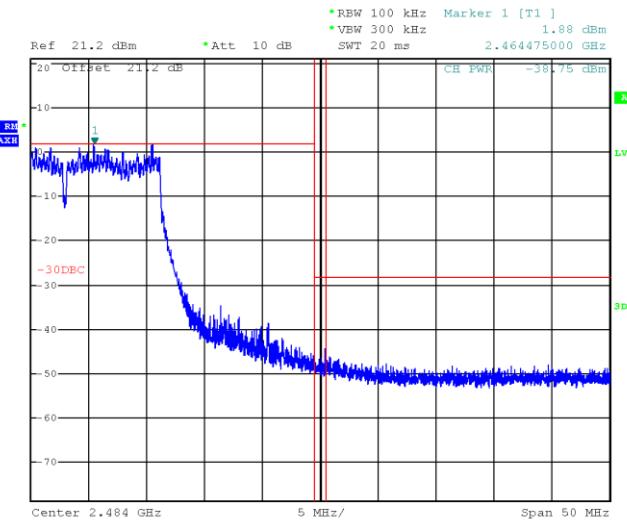
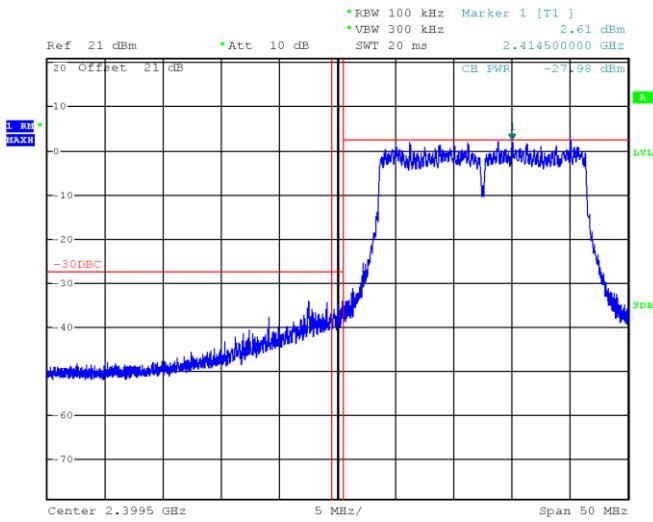
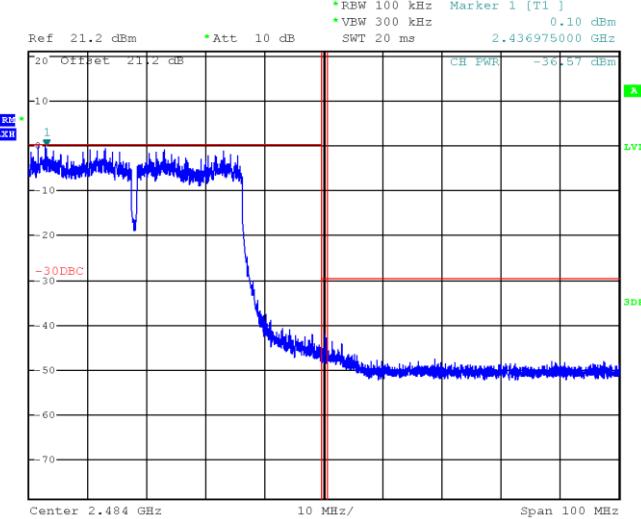
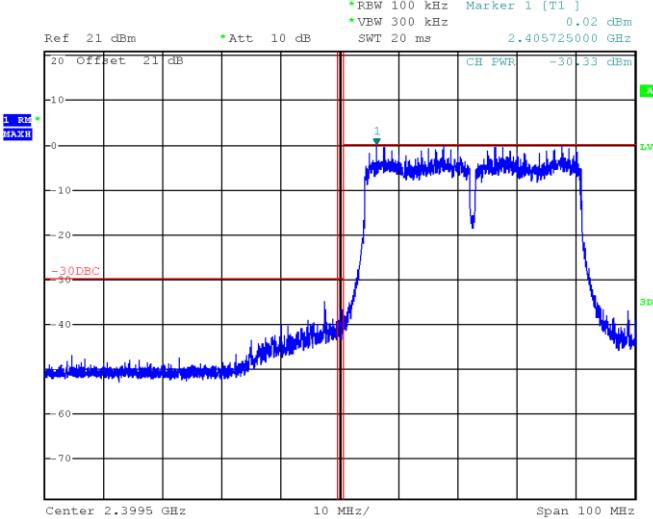


Figure 8.7-57: Conducted band edge emissions for 802.11n HT20, low channel

Figure 8.7-58: Conducted band edge emissions for 802.11n HT20, high channel



8.7.4 Test data, continued

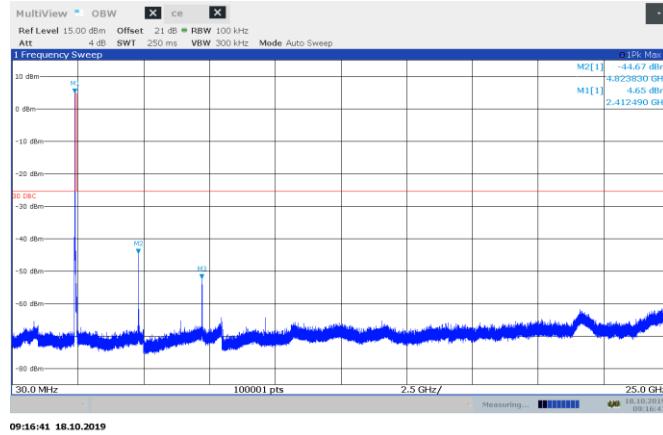


Figure 8.7-61: Conducted spurious emissions for 802.11b, low channel

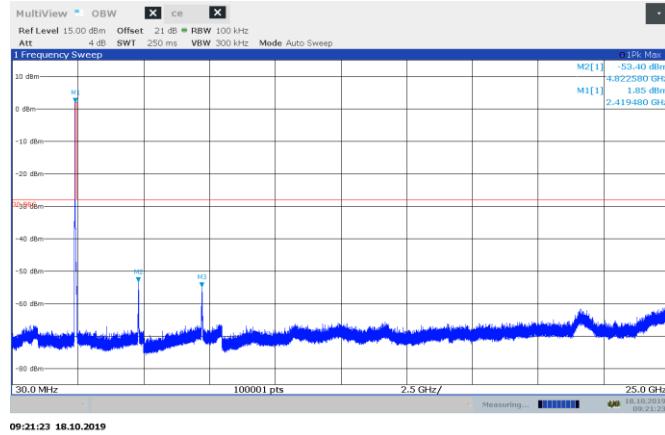


Figure 8.7-62: Conducted spurious emissions for 802.11g, low channel

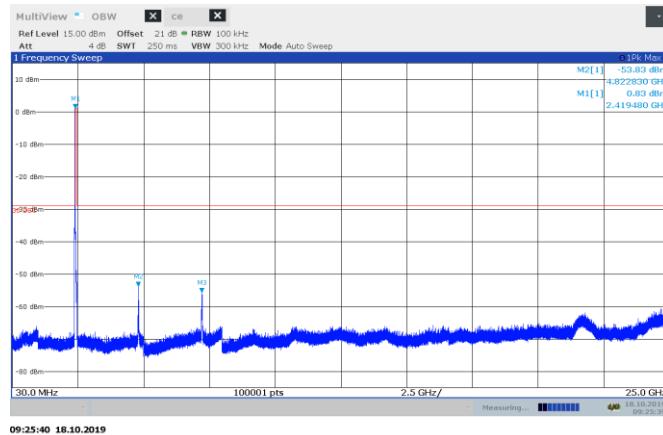


Figure 8.7-63: Conducted spurious emissions for 802.11n HT20, low channel

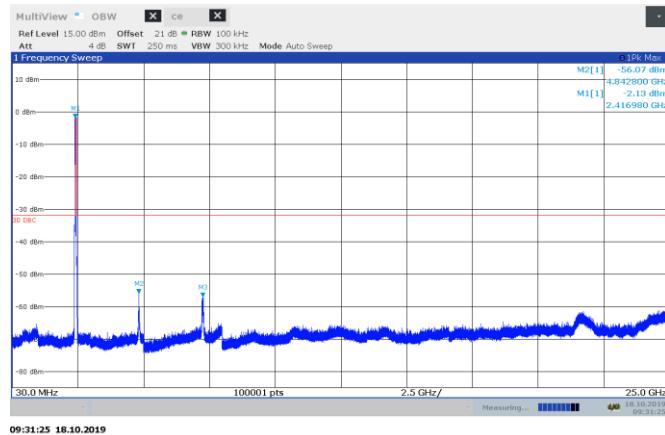
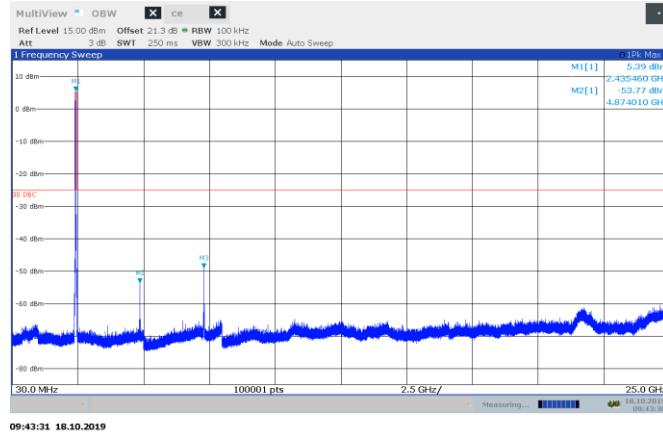


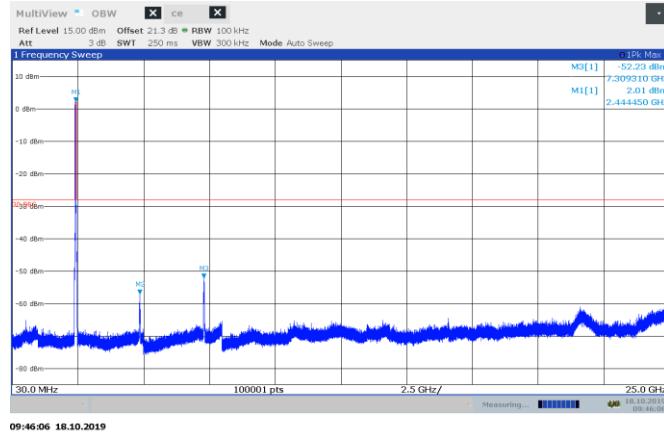
Figure 8.7-64: Conducted spurious emissions for 802.11n HT40, low channel

8.7.4 Test data, continued



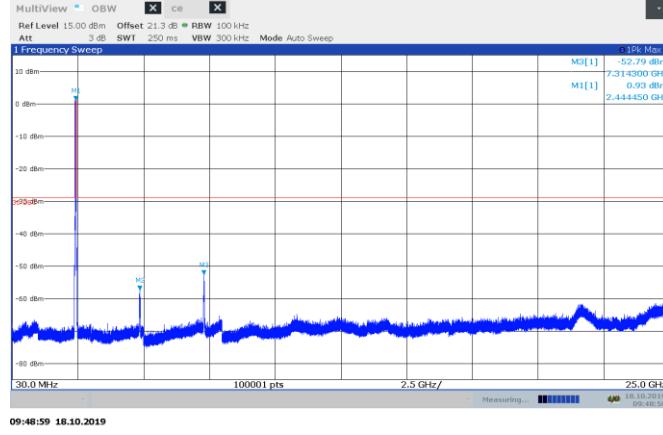
09:43:31 18.10.2019

Figure 8.7-65: Conducted spurious emissions for 802.11b, mid channel



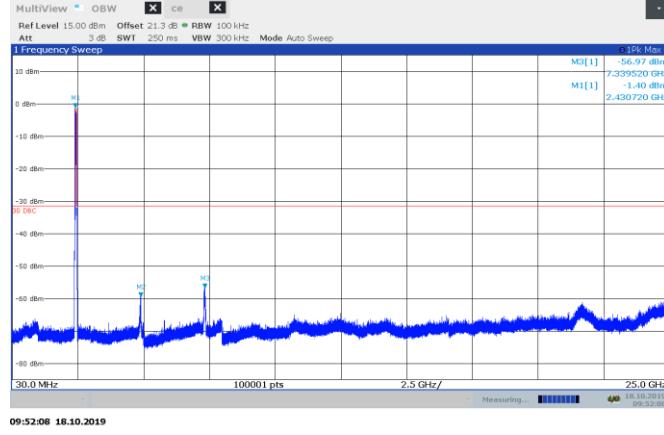
09:46:06 18.10.2019

Figure 8.7-66: Conducted spurious emissions for 802.11g, mid channel



09:46:59 18.10.2019

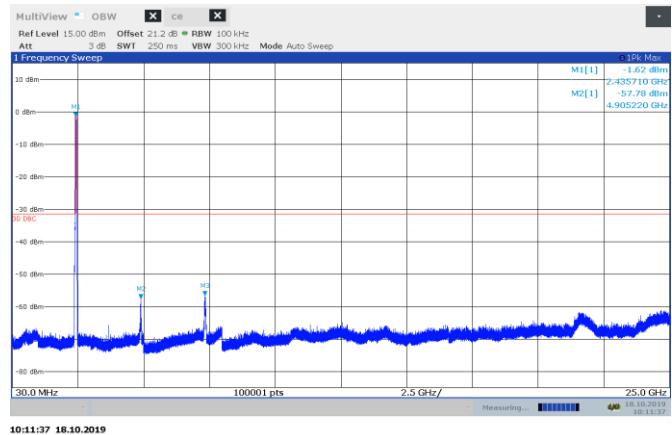
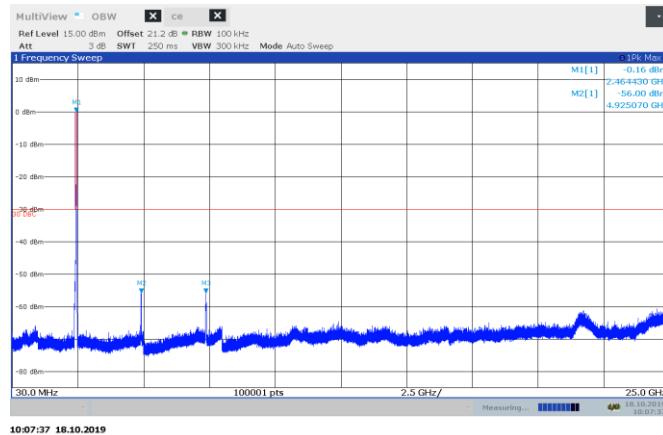
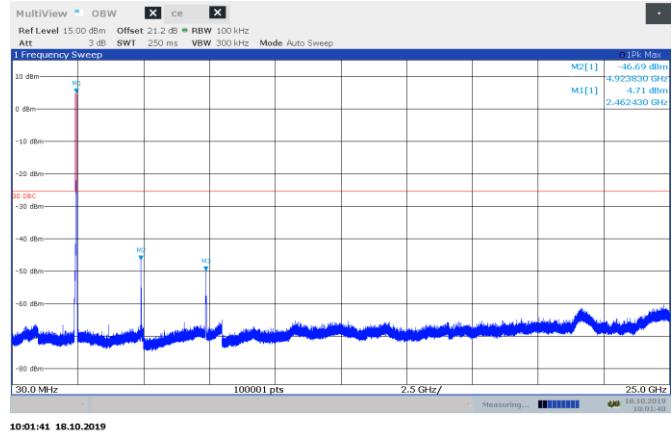
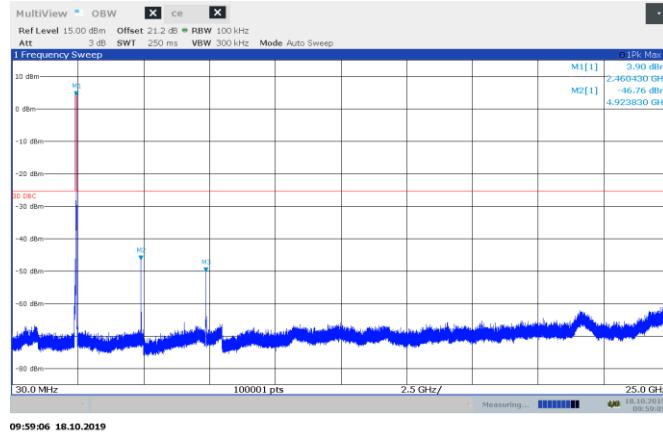
Figure 8.7-67: Conducted spurious emissions for 802.11n HT20, mid channel



09:52:06 18.10.2019

Figure 8.7-68: Conducted spurious emissions for 802.11n HT40, mid channel

8.7.4 Test data, continued



8.8 FCC 15.247(e) Power spectral density for digitally modulated devices

8.8.1 Definitions and limits

FCC §15.247 (e):

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

8.8.2 Test date

Start date

November 1, 2019

8.8.3 Observations, settings and special notes

- Power spectral density test was performed as per KDB 558074, section 8.4 with reference to ANSI C63.10 subclause 11.10.
- The test was performed using method AVGPSD-1 (trace averaging with EUT transmitting at full power throughout each sweep).

Spectrum analyser settings:

Resolution bandwidth:	3 kHz
Video bandwidth:	$\geq 3 \times$ RBW
Frequency span:	≥ 1.5 times the OBW
Detector mode:	RMS
Trace mode:	Average
Averaging sweeps number:	100

8.8.4 Test data

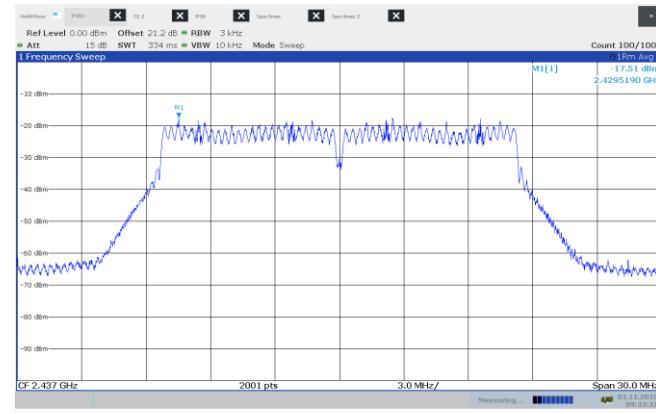
Table 8.8-1: PSD measurements results

Modulation	Frequency, MHz	PSD, dBm/3 kHz	PSD limit, dBm/3 kHz	Margin, dB
802.11b	2412	-15.1	8.0	23.1
	2437	-15.7	8.0	23.7
	2462	-16.2	8.0	24.2
802.11g	2412	-17.1	8.0	25.1
	2437	-17.5	8.0	25.5
	2462	-17.9	8.0	25.9
802.11n HT20	2412	-16.8	8.0	24.8
	2437	-17.2	8.0	25.2
	2462	-19.0	8.0	27.0
802.11n HT40	2422	-20.0	8.0	28.0
	2447	-20.3	8.0	28.3
	2452	-20.3	8.0	28.3



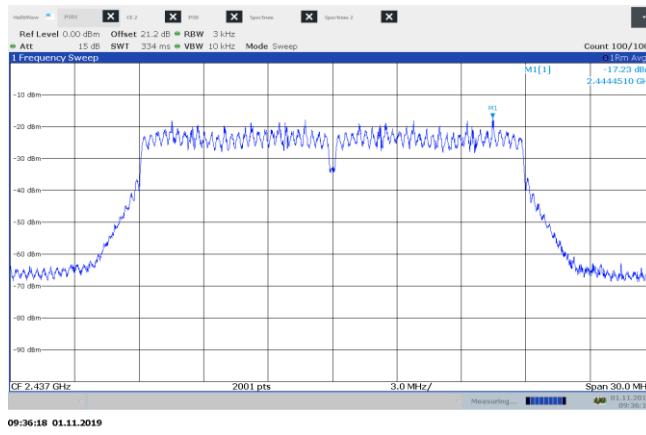
09:30:42 01.11.2019

Figure 8.8-1: PSD sample plot on 802.11b



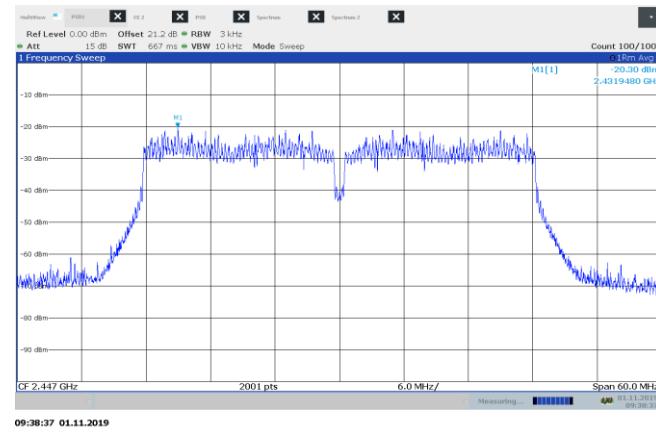
09:33:31 01.11.2019

Figure 8.8-2: PSD sample plot on 802.11g



09:36:18 01.11.2019

Figure 8.8-3: PSD sample plot on 802.11n HT20

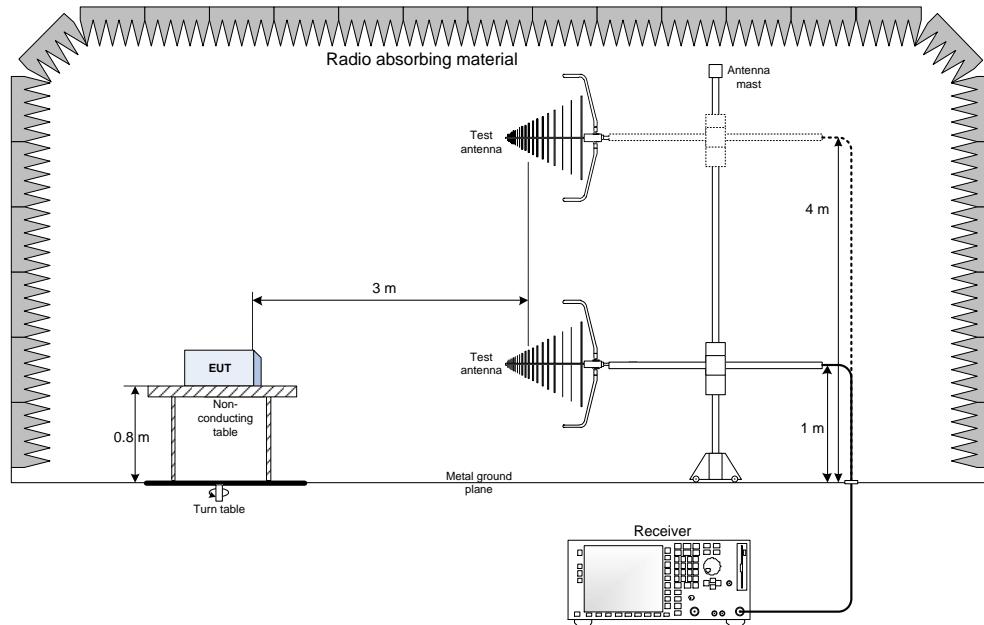


09:38:37 01.11.2019

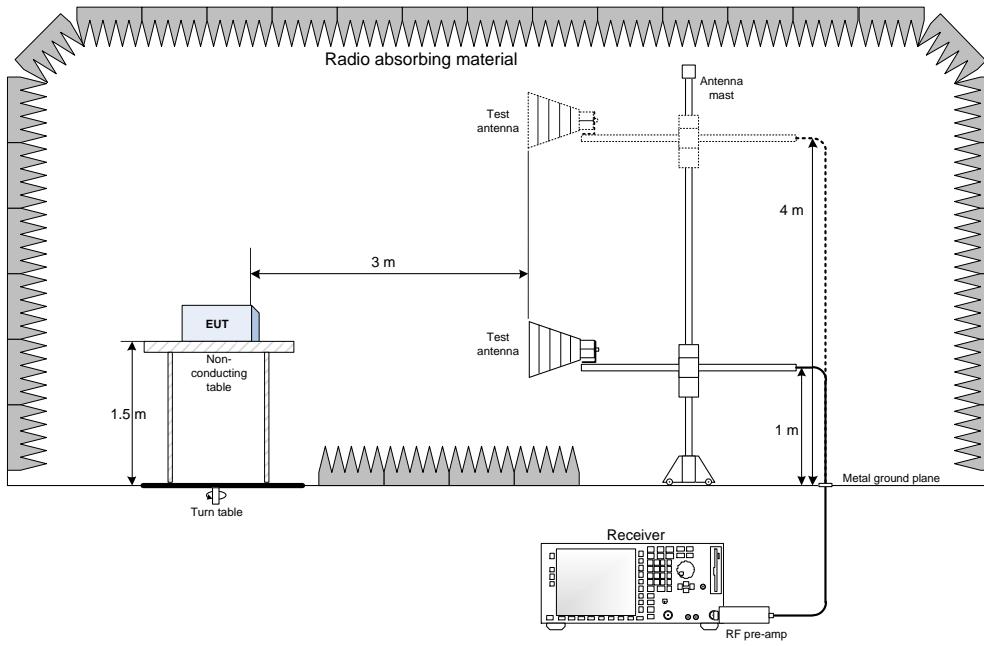
Figure 8.8-4: PSD sample plot on 802.11n HT40

Section 9. Block diagrams of test set-ups

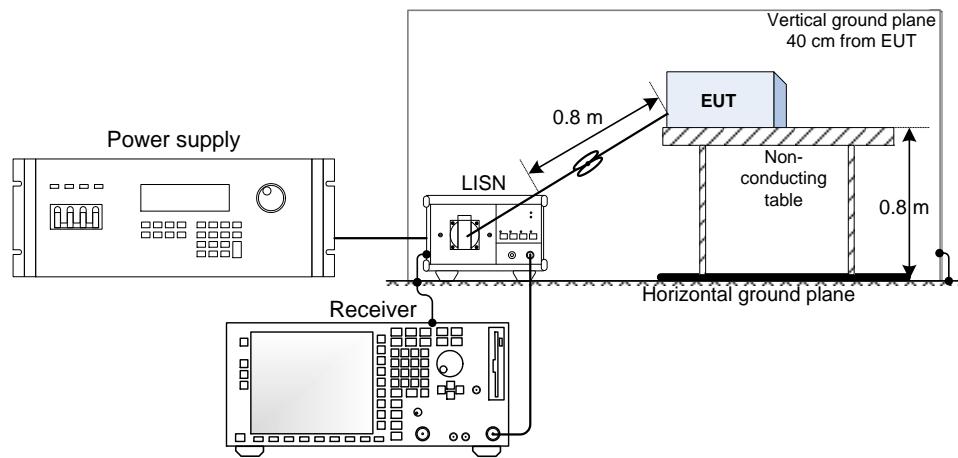
9.1 Radiated emissions set-up for frequencies below 1 GHz



9.2 Radiated emissions set-up for frequencies above 1 GHz



9.3 Conducted emissions set-up



9.4 Antenna port set-up

